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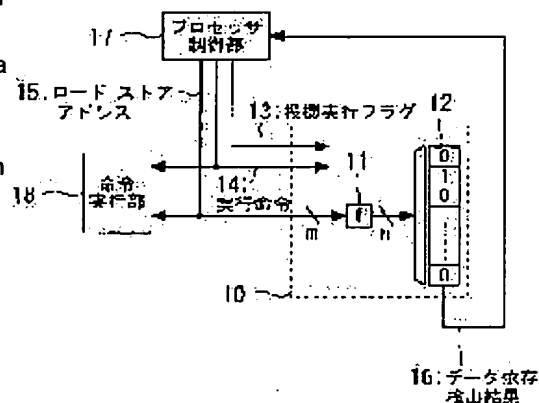
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(54) DATA RELIANCE DETECTING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a data reliance detecting device capable of improving the execution performance by the data reliance speculation execution even at a small hardware quantity, with the number of load commands allowing the data dependency speculation execution not limited by the hardware quantity, requiring a short processing time for dependency detection, and easily increasing the operation frequency of a processor.

SOLUTION: When a load command or a store command is executed in the non-program order by the processor, the possibility of the existence of the reliance between addresses where the load command or the store command is subject to process is detected by this data reliance detecting device. When the reliance actually exists, the existence of the reliance is certainly detected. Even when the reliance does not actually exist, the existence of the reliance may possibly be detected. The data reliance detecting device is provided with an address changing means changing the address where the load command and the store command are subject to process to a unique number and an execution history memory means comprising a plurality of memory means storing whether the load command or the store command is executed or not in response to the changed number.



LEGAL STATUS

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